

## IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

### LISTING OF CLAIMS:

1. (Currently Amended) A method of forming a well in a semiconductor device, comprising the steps of:

forming a trench in a semiconductor substrate using a patterned pad nitride film as an etch mask so that a field region is opened;

forming an oxide film along the surface of the trench;

performing an additional ion implantation process to form an additional ion implantation layer on the sidewalls of the trench;

filling the trench with an insulating material to form a field oxide film; and

removing the pad nitride film and then ~~then forming a well within the semiconductor substrate by means of performing a well ion implantation process and a subsequent annealing process. to form a well ion burial layer in a given depth of the~~ semiconductor substrate; and

forming a well within the semiconductor substrate by an annealing process to diffuse the impurity ion in the well ion burial layer and the additional ion implantation layer,  
wherein the additional ion implantation process and the well ion implantation process use the same type impurity ion.

2. (Currently Amended) A method as claimed in claim 1, wherein the additional ion implantation process includes implanting an ion in a tilt of 3 to 10° and rotating the device 4 times.

3. (Canceled)

4. (New) A method of forming a well in a semiconductor device, comprising the steps of:

forming a trench in a semiconductor substrate using a patterned pad nitride film as an etch mask so that a field region is opened;

forming an oxide film along the surface of the trench;

performing an additional ion implantation process to form an additional ion implantation layer on sidewalls of the trench, wherein ions are implanted in a tilt so that the ions are implanted only on the sidewalls of the trench;

filling the trench with an insulating material to form a field oxide film;

removing the pad nitride film and then performing a well ion implantation process to form a well ion burial layer in a given depth of the semiconductor substrate; and

forming a well within the semiconductor substrate by an annealing process to diffuse the impurity ion in the well ion burial layer and the additional ion implantation layer,

wherein the additional ion implantation process and the well ion implantation process use the same type impurity ion.

5. (New) A method as claimed in claim 4, wherein the additional ion implantation process includes implanting the ions in a tilt of 3 to 10°.

6. (New) A method as claimed in claim 4, wherein the additional ion implantation process is performed while the semiconductor device is being rotated 4 times.